



N6700B Low-Profile MPS Mainframe, 400W

Product Status: Currently Orderable | Currently Supported

Overview

Key Specifications

Maximum Total Output Power (= Sum of Total Module Output Power)

- 400 W when operating from 100 - 240 VAC input

AC Input

- Nominal Input Ratings: 100 VAC - 240 VAC; 50/60 Hz/400 Hz
- Input Range: 86 VAC - 264 VAC
- Power Consumption: 1000 VA typical
- Fuse Internal fuse (not customer accessible)

Protection Response Characteristics

- INH input: 5 μ s from receipt of inhibit to start of shutdown
- Fault on coupled outputs: < 10 μ s (from receipt of fault to start of shutdown)

Description

Agilent high performance DC power supplies offer speed and accuracy for test optimization. The single low-profile modular power system, 50-300 W, GPIB, LAN, USB, LXI Class C N6700B series provides small size up to 4 outputs in 1U of rack space; 20 DC power modules, basic, performance and precision models; as well as fast output programming with active down programming. The Agilent 400W, GPIB, N6700B is a 1U, 4-slot mainframe that accepts 1 to 4 N6700 series modules in any combination; modules are ordered separately.

Agilent N6700 MPS Low-Profile Modular Power System

Models: N6700B, N6701A, N6702A, N6710B,
N6711A, N6712A, N6731B-36B, N6741B-46B,
N6751-54A, N6761A-62A, N6773A-76A

Product Overview

New!
Higher Power
in Same Space

**Now
Available—**
300 Watt
High-Performance
DC Power Modules



- Ideal for ATE systems in R&D, Design Validation, and Manufacturing
- Small size: up to 4 outputs in 1U of rack space
- Flexible, modular system: Can mix and match power levels and performance levels to optimize investment
- Performance modules for critical test requirements
- Value modules for basic DC power requirements
- Fast command processing times to improve throughput
- Connect via GPIB, LAN, or USB
- Fully compliant to LXI Class C specification

**For Power
Solutions
in R&D –
See back cover**

Agilent N6700B, N6701A, N6702A MPS Mainframes

N6700B, N6701A, N6702A

Maximum Total Output Power (= Sum of Total Module Output Power)	N6700B	400 W	when operating from 100 – 240 VAC input
	N6701A	600 W	when operating from 100 – 240 VAC input
	N6702A	1200 W	when operating from 200 – 240 VAC input
		600 W	when operating from 100 – 120 VAC input
Command Processing Time			
	From receipt of command to start of the output change	≤ 1 ms	
Protection Response Characteristics			
	INH input	5 μs	from receipt of inhibit to start of shutdown
	Fault on coupled outputs	< 10 μs	(from receipt of fault to start of shutdown)
Digital Control Characteristics			
	Maximum voltage ratings	16.5 VDC/- 5 VDC between pins (pin 8 is internally connected to chassis ground).	
	Pins 1 and 2 as FLT output	Maximum low-level output voltage = 0.5 V @ 4 mA Maximum low-level sink current = 4 mA Typical high-level leakage current = 0.14 mA @ 16.5 VDC	
	Pins 1 - 7 as digital/trigger outputs (pin 8 = common)	Maximum low-level output voltage = 0.5 V @ 4 mA; 1 V @ 50 mA; 1.75 V @ 100 mA Maximum low-level sink current = 100 mA Typical high-level leakage current = 0.12 mA @ 16.5 VDC	
	Pins 1 - 7 as digital/trigger inputs and pin 3 as INH input (pin 8 = common)	Maximum low-level input voltage = 0.8 V Minimum high-level input voltage = 2 V Typical low-level current = 2 mA @ 0 V (internal 2.2 k pull-up) Typical high-level leakage current = 0.12 mA @ 16.5 VDC	
Interface Capabilities			
	GPIB:	SCPI - 1993, IEEE 488.2 compliant interface	
	LXI Compliance	Class C (applies to mainframes with firmware revision C.00.02 and up)	
	USB 2.0	Requires Agilent IO Library version M.01.01 and up, or 14.0 and up	
	10/100 LAN	Requires Agilent IO Library version L.01.01 and up, or 14.0 and up	
	Built-in Web server	Requires Internet Explorer 5+ or Netscape 6.2+	
Environmental Conditions			
	Operating environment	Indoor use, installation category II (for AC input), pollution degree 2	
	Temperature range	0°C to 55°C (current is derated 1% per °C above 40°C ambient temperature)	
	Relative humidity	Up to 95%	
	Altitude	Up to 2000 meters	
	Storage temperature	-30°C to 70°C	
	LED statement	Any LEDs used in this product are Class 1 LEDs as per IEC 825-1	

Agilent N6700B, N6701A, N6702A MPS Mainframes (Continued)

N6700B, N6701A, N6702A

Regulatory Compliance	EMC	<p>Complies with the European EMC directive 89/336/EEC for Class A test and measurement products.</p> <p>Complies with the Australian standard and carries the C-Tick mark.</p> <p>This ISM device complies with Canadian ICES-001.</p> <p>Cet appareil ISM est conforme à la norme NMB-001 du Canada.</p> <p>Electrostatic discharges greater than 1 kV near the I/O connectors may cause the unit to reset and require operator intervention.</p>
	Safety	<p>Complies with the European Low Voltage Directive 73/23/EEC and carries the CE-marking. This product also complies with the US and Canadian safety standards for test and measurement products.</p>
Acoustic Noise Declaration	<p>This statement is provided to comply with the requirements of the German Sound Emission Directive, from 18 January 1991.</p>	<p>Sound Pressure Lp < 70 dB(A), *At Operator Position, *Normal Operation, *According to EN 27779 (Type Test). Schalldruckpegel Lp <70 dB(A) *Am Arbeitsplatz, *Normaler Betrieb, *Nach EN 27779 (Typprüfung).</p>
Output Terminal Isolation	Maximum Rating	No output terminal may be more than 240 VDC from any other terminal or chassis ground.
AC Input	Nominal Input Ratings	100 VAC – 240 VAC; 50/60 Hz/400 Hz
	Input Range	86 VAC – 264 VAC
	Power Consumption	1000 VA typical (N6700B mainframes) 1500 VA typical (N6701A mainframes) 3000 VA typical (N6702A mainframes)
	Fuse	Internal fuse (not customer accessible)
Dimensions	Height	44.45 mm; 1.75 in.
	Width	432.5 mm; 17.03 in.
	Depth (including handles)	585.6 mm; 23.06 in. (N6700B/N6701A mainframes) 633.9 mm; 24.96 in. (N6702A mainframes)
Weight	N6700B with 4 installed modules	Net: 12.73 kg; 28 lbs.
	N6701A with 4 installed modules	Net: 11.82 kg; 26 lbs.
	N6702A with 4 installed modules	Net: 14.09 kg; 31 lbs.
	Single-wide power module	Net: 1.23 kg; 2.71 lbs
	Double-wide power module	Net: 2.18 kg; 4.8 lbs